

# GUM RECEPTACLE HAVING ATTACHING AND DETACHING MEANS

## BACKGROUND OF THE INVENTION

### 5 Field of the Invention

The present invention relates, in general, to a gum receptacle and, more particularly, to a gum receptacle which is constructed to be attached to and detached from a support element, irrespective of a place, such as at home, in an office  
10 or inside a vehicle, so that a gum can be easily taken out of the gum receptacle, thereby rendering user convenience.

### Description of the Prior Art

Generally, chewing gums in the number of 5 to 7 are packed  
15 by packing paper in a state wherein each of them is wrapped by silver paper or vinyl. Recently, a gum receptacle defining a space in which the gum package or individually wrapped gums can be received has been disclosed in the art.

Referring to FIG. 10, there is shown an exploded  
20 perspective view illustrating the conventional gum receptacle. The gum receptacle 1 is composed of a lid 2 and a case 4 for receiving gums therein. The lid 2 and the case 4 are threadedly coupled to and decoupled from each other.

The conventional gum receptacle 1 has a flat bottom wall,  
25 and therefore, the gum receptacle 1 must be placed on a flat

surface or held upright by a suitable support member (not shown).

Consequently, in the case that the gum receptacle is used in a motor vehicle, the gum receptacle must be maintained in a predetermined box or at a place where vibration is generated to a reduced degree.

The conventional gum receptacle 1 constructed as mentioned above suffers from defects in that it causes inconvenience and danger, particularly, to a person driving a vehicle. In other words, when the person desires to chew a gum, it is necessary to take out the gum receptacle 1 from a storing place, threadedly open the lid 2, pull out a gum, close the lid 2, and replace the gum receptacle 1 to the original storing place. In this regard, even when the gum receptacle 1 is placed close to a driver's seat, the above-described procedure which should be conducted to chew the gum causes inconvenience and danger to the driver.

#### SUMMARY OF THE INVENTION

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Accordingly, the present invention has been made keeping in mind the above problems occurring in the prior art, and an object of the present invention is to provide a gum receptacle which is constructed to be attached to and detached from a support element, irrespective of a place, such as at home, in

an office or inside a vehicle so that a gum can be easily taken out of the gum receptacle, thereby rendering user convenience.

In order to achieve the above object, according to one aspect of the present invention, there is provided a gum  
5 receptacle comprising a case defining a space for receiving gums, a lid connected to the case by a hinge, and attaching and detaching means provided on a predetermined portion of the case so as to attach and detach the case to and from a support element.

10 The support element includes an article or a portion of an article to and from which the gum receptacle according to the present invention may be required to be attached and detached.

The attaching and detaching means preferably includes a magnet, a double-sided adhesive tape, etc.

15 When the attaching and detaching means comprises a magnet, it is preferred that each of the support element and the gum receptacle comprises a magnetic piece, or a non-magnetic or non-metallic piece to which a magnetic member is secured.

Each of the magnetic piece and the magnetic member means  
20 an article made of a material which has a property capable of being attracted by the magnet, for example, such as Fe, Co, Ni and alloys thereof.

While the magnet may be provided outside the gum receptacle, it is preferred that the magnet is provided inside  
25 the gum receptacle. If the magnet is provided outside the gum

receptacle, when taking the gum receptacle into and out of a pocket, annoyance is caused, and also, since the magnet is adhered to the gum receptacle by an adhesive or the like, the possibility of the magnet to be released is increased.

5        It is preferred that a bottom wall of the case is formed to have a slope. In a state wherein the sloped bottom wall of the case is attached to a vertical surface of the support element, the gum receptacle is held sloped in an upward or downward direction. In particular, if the gum receptacle is  
10 attached to the support element so that the lid is directed upward, when compared to another receptacle which is horizontally attached to the support element, a user can easily take contents out of the receptacle, details of which will be described in a preferred embodiment of the present invention  
15 given below.

Further, it is preferred that a plurality of protrusions are formed on a circumferential outer surface of the case.

The protrusions prevent slippage from occurring when the case is grasped by the hand, and render finger-pressure  
20 therapy.

#### BRIEF DESCRIPTION OF THE DRAWINGS

The above and other objects, features and other advantages  
25 of the present invention will be more clearly understood from

the following detailed description when taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a perspective view illustrating a gum receptacle in accordance with a first embodiment of the present invention;

5        FIG. 2 is an explanatory view illustrating a coupling relationship between the gum receptacle according to the first embodiment of the present invention and a support element made of a magnetic material;

10       FIG. 3 is an explanatory view illustrating a coupling relationship between the gum receptacle according to the first embodiment of the present invention and a support element made of a non-magnetic material;

15       FIG. 4 is an explanatory view illustrating a procedure in which the gum receptacle according to the first embodiment of the present invention and a support element are coupled with each other by means of a double-sided adhesive tape;

20       FIG. 5 is an explanatory view illustrating a coupling relationship between a gum receptacle in accordance with a second embodiment of the present invention and a support element;

FIG. 6 is a perspective view illustrating a gum receptacle in accordance with a third embodiment of the present invention;

FIG. 7 is a side view of FIG. 6;

25       FIGS. 8 and 9 are a perspective view and a sectional view, respectively, illustrating a state wherein the gum receptacle

according to the third embodiment of the present invention is attached to a support element; and

FIG. 10 is an exploded perspective view illustrating the conventional gum receptacle.

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#### DETAILED DESCRIPTION OF THE INVENTION

Reference will now be made in greater detail to a preferred embodiment of the invention, an example of which is illustrated in the accompanying drawings. Wherever possible, the same reference numerals will be used throughout the drawings and the description to refer to the same or like parts.

FIG. 1 is a perspective view illustrating a gum receptacle in accordance with a first embodiment of the present invention. FIG. 2 is an explanatory view illustrating a coupling relationship between the gum receptacle according to the first embodiment of the present invention and a support element made of a magnetic material. FIG. 3 is an explanatory view illustrating a coupling relationship between the gum receptacle according to the first embodiment of the present invention and a support element made of a non-magnetic material. FIG. 4 is an explanatory view illustrating a procedure in which the gum receptacle according to the first embodiment of the present invention and a support element are coupled with each other by

means of a double-sided adhesive tape. FIG. 5 is an explanatory view illustrating a coupling relationship between a gum receptacle in accordance with a second embodiment of the present invention and a support element.

5 As shown in FIG. 1, a gum receptacle 10 according to the present invention, which is constructed to be capable of being attached and detached to and from a support element 20, includes a case 11, a lid 12, a hinge 13, a magnet 14 and a grip 16.

10 While the present invention is not limited to specific configurations of the case 11, it is preferred that the case 11 has a cylindrical configuration. If the case 11 has a polygonal configuration such as of a triangle and a quadrangle, when taking the received gums out of the case 11, the hand or  
15 finger is likely to be injured or inconvenience is caused.

The support element 20 means an article to and from which the gum receptacle of the present invention will be attached and detached, for example, such as a refrigerator, an inside panel of a motor vehicle, a desk, and the like.

20 In FIG. 1, it is to be noted that the magnet 14 is provided on a bottom wall of the case 11. While not shown in the drawings, a groove having a size corresponding to the magnet 14 is defined on the bottom wall of the case 11, and the magnet 14 is accommodated in the groove. The reason for this  
25 is to prevent the contents received in the receptacle from

being damaged by the presence of the magnet 14. That is to say, when the magnet 14 is provided in the case 11, it is preferred that the magnet 14 does not project from a surface of the case 11.

5       The grip 16 is formed to allow the lid 12 to be easily opened using the finger.

          In the present invention, in order to ensure easy opening and closing of the lid 12, it is preferred that a depression is defined adjacent to an upper end of the case 11 at a position  
10       corresponding to the grip 16 of the lid 12.

          The depression is defined to allow the finger to be inserted therein to thereby conveniently manipulate the grip 16.

          It is preferred that the depression is defined to have a  
15       depth which is gradually increased toward the upper end of the case 11.

          As shown in FIG. 2, in the case that the support element 20a comprises a magnetic piece, by providing the magnet 14 to the gum receptacle 10, it is possible to attach and detach the  
20       gum receptacle 10 to and from the support element 20a. However, in the case that the support element 20a comprises a non-magnetic piece, it is impossible to attach and detach the gum receptacle 10 to and from the support element 20a according to the above-described way. In this consideration, the present  
25       inventor devised a construction as shown in FIG. 3. Namely, in



this construction, after the non-magnetic piece 20b and a magnetic member 22 are bonded to each other by a bonding material 21, by coupling and decoupling the gum receptacle 10 to and from the magnetic member 22, it is possible to attach and detach the gum receptacle 10 to and from the support element 20b comprising the non-magnetic piece.

In an example, the bonding material 21 may comprise a double-sided adhesive tape, a bond, an adhesive, etc.

While it was described that the gum receptacle 10 and the support element 20 are attached to and detached from each other by way of the magnets 14 and 14', a person skilled in the art will readily recognize that other attaching and detaching members can be employed.

A preferred attaching and detaching member is a double-sided adhesive tape which is covered on both surfaces thereof by a pair of backing sheets, respectively.

More concretely speaking in this connection, as shown in FIG. 4, one backing sheet 15b which is provided to one surface of the double-sided adhesive tape 15 is removed, and then, the exposed surface of the double-sided adhesive tape 15 is attached to a lower surface of the case 11. Thereafter, the other backing sheet 15b which is provided to the other surface of the double-sided adhesive tape 15 is removed, and then, the exposed surface of the double-sided adhesive tape 15 is attached to the support element 20. In this way, the gum

receptacle 10 can be detachably attached to the support element 20.

In these ways, as occasion demands, it is possible to attach and detach the gum receptacle 10 to and from the support  
5 element 20.

In the present invention, the attaching and detaching means, that is, the magnet 14 or the double-sided adhesive tape 15 can be provided to the bottom wall as well as a side wall as shown in FIG. 5, of the case 11. In the latter case, the lid  
10 12 is directed upward.

If the side wall of the gum receptacle 10 is attached to and detached from the vertical surface of the support element which is positioned close to the driver, the driver can easily take the contents out of the gum receptacle 10 using the hand.

15 FIG. 6 is a perspective view illustrating a gum receptacle in accordance with a third embodiment of the present invention. FIG. 7 is a side view of FIG. 6.

In the present invention, as shown in FIGS. 6 and 7, it is preferred that the bottom wall of the case 11 is formed to have  
20 a slope. That is to say, in a state wherein the bottom wall of the case 11 is not sloped, the case 11 has a rectangular or a square sectional shape. However, in a state wherein the bottom wall of the case 11 is formed to have a slope, the case 11 has substantially two trapezoidal sectional shapes of which one  
25 side extends along an oblique path.

When the case 11 of the present invention is viewed on its longitudinal section, the case 11 may have the trapezoidal sectional shape as well as other sectional shapes of quadrangles (including a rhombus, a parallelogram, etc.).

- 5 If the bottom surface of the case 11 is formed to have a slope as described above, a height of the side wall of the case 11 is gradually changed along a circumferential direction. In other words, the case 11 has a minimum height and a maximum height.

It is preferred that the hinge 13 according to the present  
10 invention is provided to a portion of the side wall which has the minimum height. The reason for this will be described with reference to FIGS. 8 and 9.

FIGS. 8 and 9 are a perspective view and a sectional view, respectively, illustrating a state wherein the gum receptacle  
15 according to the third embodiment of the present invention is attached to a support element.

In a state wherein the gum receptacle 10 is attached to the vertical surface of the support element 20 such that the a portion of the side wall which has the maximum height is  
20 positioned at bottom and the portion of the side wall which has the minimum height is positioned at top, the gum receptacle 10 is directed upward at a predetermined angle. Also, when the lid 12 hingedly connected to the gum receptacle 10 is completely opened, the lid 12 is maintained parallel to the  
25 ground.

Here, when the lid 12 is opened, the lid 12 must be held

at least parallel to the ground. Namely, it is preferred that the lid 12 is provided in such a way as to be opened at least parallel to the ground. If the lid 12 is opened not to reach parallel to the ground, annoyance is caused when taking the  
5 contents out of the gum receptacle 10 using the hand.

If the hinge 13 is provided to the portion of the side wall which has the minimum height, the driver can easily open the lid 12 by pulling forward the grip 16 using a distal end of the finger and easily close the lid 12 by slightly pressing the  
10 lid 12 using the finger. That is to say, in the case of an ordinary person, especially, a driver, it is more convenient to close the lid 12 by pressing the lid 12 rather than raising the lid 12. In particular, in the case of a driver, it is more advantageous that the hinge 13 is provided to the portion of  
15 the side wall which has the minimum height to pivotally support the lid 12.

Also, in the present invention, as shown in FIGS. 6 and 7, it is preferred that a plurality of protrusions 17 are formed on a circumferential outer surface of the case 10' so as to  
20 prevent slippage from occurring when the case 11 is grasped by the hand and render finger-pressure therapy.

As apparent from the above description, the gum receptacle according to the present invention provides advantages in that the gum receptacle can be attached to and detached from a  
25 support element, irrespective of a place, such as at home, in

an office or inside a vehicle. Further, since a gum can be easily taken out of the gum receptacle, user convenience is rendered.

Although a preferred embodiment of the present invention  
5 has been described for illustrative purposes, those skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing from the scope and spirit of the invention as disclosed in the accompanying claims.